

# MANUFACTURING DESIGN AND PROCESS ANALYSIS SYSTEM

## Abstract of the Disclosure

5       Methods, apparatuses and systems that facilitate the design, production and/or measurement tasks associated with manufacturing and other processes. In one embodiment, the present invention provides an understanding of how the multiple characteristics of a given process output are related to each other and to process inputs. This knowledge facilitates a reduction in measurement costs. It also facilitates an understanding of the sometimes complex  
10 interrelationships between design targets, design tolerances, process inputs, process control variables, average process output and variation in the process output. As discussed in more detail below, embodiments of the present invention facilitate 1.) determination of design target values, 2.) determination of design specification limits, 3.) design of process inputs, 4.) determination of process control variable settings, and/or 5.) reduction of measurement costs.